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# (54) Title: ALDEHYDE AND ALCOHOL COMPOSITIONS DERIVED FROM SEED OILS

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(57) Abstract: An aldehyde composition derived by hydroformylation of a transesterified seed oil and containing a mixture of formyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoformyl, greater than about 1 to less than about 65 percent diformyl, and greater than about 0.1 to less than about 10 percent triformyl-substituted fatty acids or fatty acid esters, and having a diformyl to triformyl weight ratio of greater than about 5/1; preferably, greater than about 3 to less than about 20 percent saturates; and preferably, greater than about 1 to less than about 20 percent unsaturates. An alcohol composition derived by hydrogenation of the aforementioned aldehyde composition, containing a mixture of hydroxymethyl-substituted fatty acids or fatty acid esters having the following composition by weight: greater than about 10 to less than about 95 percent monoalcohol {mono(hydroxymethyl)}, greater than about 1 to less than about 65 percent diol {di(hydroxymethyl)}, greater than about 0.1 to less than about 10 percent triol, tri(hydroxmethyl)-substituted fatty acids or fatty acid esters; preferably greater than about 3 to less than about 35 percent saturates; and preferably, less than about 10 percent unsaturates. The alcohol composition can be converted into an oligomeric polyol for use in the manufacture of polyurethane slab stock flexible foams.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07C67/347 C07C69/716

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#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) C07C C11C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, COMPENDEX

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Υ	US 3 787 459 A (FRANKEL E) 22 January 1974 (1974-01-22) cited in the application column 1, line 13 - line 16 column 1, line 30 - line 43 column 2, line 21 - line 42 column 2, line 46 - column 3, line 61 column 4, line 10 - line 12 column 4, line 48 - line 57 column 5, line 50 - column 6, line 18; claims 1-3,5-7; examples 19-22 -/	1-17
	er documents are listed in the continuation of box C.  Patent family members are listed in	n annex.

Further documents are listed in the continuation of box C.	Y Patent family members are listed in annex.
Special categories of cited documents:      A* document defining the general state of the art which is not considered to be of particular relevance      E* earlier document but published on or after the international filing date      C* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clation or other special reason (as specified)      O* document referring to an oral disclosure, use, exhibition or other means	"T" later document published after the international filing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-
*P* document published prior to the international filling date but later than the priority date claimed  Date of the actual completion of the international search	ments, such combination being obvious to a person skilled in the art.  *&* document member of the same patent family  Date of mailing of the international search report
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